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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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09/890,613

07/31/2001

Michael Bischof

4191/PCT

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01/13/2003

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EXAMINER

EASTHOM, KARL D

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 01/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/890,613

Applicant(s)
Bischof et al.

Examiner
Karl Easthom

Art Unit
2832



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Nov 25, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 13-16 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. Applicant's election with traverse of Species 3, Figs. 7-10 in Paper No. 11 is acknowledged. The traversal is on several ground. The examiner chooses to examine all the claims without regard to the merits of the traversal.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-8 and 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what "the sensor tip" means where there is no antecedent basis. The "sensor tip" also inferentially claims a "sensor" and it is not clear if a sensor is claimed, or how it relates to the heater.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Boher et al. Boher discloses the device at Fig. 1 with heating layer 80, having partial resistance smaller in

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resistance at the tip where the arrow 113 points, since the lines of the meander get smaller toward that tip. The supply line part is 90/92.

6. Claims 1-8 and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Baxter et al. Baxter discloses the claimed invention at Fig. 1 where the supply line part is 12, 14, with meander -shape 16, 26, 28, all comprising different partial heating resistances. In claims 2-3 the resistances 26, 28 are less than that of 16, or a small portion of 18 is less in resistance than a larger portion of 16 since it is shorter, or 22, 24 are smaller also. Also, in claims 2-3, any length portion can be chosen as a partial resistance, with smaller ones near the tip chosen to meet the claim. In claims 5-6, different and enlarging widths are shown for 16, 22, 24, 26, 28, (compare 18 to 28 widths). In claims 13-16, the elements 22, 24 are considered contacts or measuring conductor paths, since they contact the resistors 16, 18, and can be used as tap points.

7. Claims 1-8 and 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang et al. Wang discloses the claimed invention at Fig. 2b with heating layer 110, and supply line part 135. In claims 13-16, the contacts 160 with the small line attached to heating conductor path 110 meet the claims, where the small line between 110 and 160 forms part the measuring conductor path and the ends attached to 110 are the "contacts" of the claim since that part contacts the heating conductor 110. For all claims the large thick line at the end of the sensor tip, is thicker than the other lines, and hence less in resistance. This is similar to the large thick line near the tip end of applicant's embodiments. Also, some of the meander portions decrease in length as one moves toward the tip end, meeting the claim. And as noted above, any length portion can be chosen as a partial resistance, with a smaller and larger ones chosen to meet the claim

8. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kubota et al. Kubota discloses the claimed invention at Fig. 1 with 22 smaller in resistance than 23. Note that at col. 4, lines 57-65, only two resistance regions are contemplated, and see claim 1 Kubota et al. In claims 3-8, one can see that the path length is smaller and the width is larger in region 22 than that in 23.
9. Claims 1-4 and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Gruner et al. Gruner discloses the device at Fig. 2 with heating layer 4, 5, and partial resistance 5 smaller in resistance at the tip than that of partial resistance 4. The additional measuring conductor is 16, with the contacts at the ends of line 16 meeting claims 13-16.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl Easthom whose telephone number is (703)308-3306. The examiner can normally be reached on M-Th. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad, can be reached on (703)308-7619. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7722. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


KARL D. EASTHOM
PRIMARY EXAMINER